

# Results of a National Driver Registration Statistical Match

Kelly R. Buck Defense Personnel Security Research Center

David A. Richmond Defense Personnel Security Research Center

Howard E. Timm Defense Personnel Security Research Center

#### Results of a National Driver Register Statistical Match

Kelly R. Buck Defense Personnel Security Research Center

David A. Richmond Defense Personnel Security Research Center

Howard E. Timm Defense Personnel Security Research Center

> Released By James A. Riedel Director

#### REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

TO THE ABOVE ADDRESS.	_	
1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED (From - To)
12-10-2006	Technical Report	January 2003-December 2003
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER
Results of a National Driver Regis	ter Statistical Match	
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	THE TENT	5d. PROJECT NUMBER
Kelly R. Buck, David A. Richmon	d, Howard E. Timm	
		5e. TASK NUMBER
		EC MODICUNIT NUMBER
		5f. WORK UNIT NUMBER
7 DEDECOMING ODG ANIZATION NA	ME(C) AND ADDRESS(ES)	O DEDECOMING ODGANIZATION
7. PERFORMING ORGANIZATION NA	MME(5) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
		1
Defense Personnel Security Resear	ch	
Center		
99 Pacific Street, Suite 455-E		
Monterey, CA 93940-2497		
9. SPONSORING / MONITORING AGE	ENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S
		ACRONYM(S)
Defense Personnel Security Resear	rch	PERSEREC
99 Pacific Street, Suite 455-E		
Monterey, CA 93940-2497		11. SPONSOR/MONITOR'S REPORT
		NUMBER(S)

#### 12. DISTRIBUTION / AVAILABILITY STATEMENT

Unrestricted

#### 13. SUPPLEMENTARY NOTES

On October 28, 2004, the President of the United States signed into law the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year* 2005. Section 1061 of that act enables the National Driver Register (NDR) to be checked for individuals who either (1) have or are seeking access to national security information for purposes of Executive Order 12968, or (2) are being investigated for federal employment under authority of Executive Order 10450. The objective of this PERSEREC study was to compare results of Local Agency Checks (LACs) to results of checks of the NDR for the same group of subjects. Results show that the NDR can efficiently and effectively help identify significant driving-related derogatory information that should be made available to adjudicators and decision makers when determining whether to place or retain individuals in positions of trust. PERSEREC and National Highway Transportation Safety Administration (NHTSA) should initiate meetings to develop the policies, procedures, and automated system linkages needed to implement electronic NDR checks for use in federal personnel security background screening.

16. SECURITY CLA Unclassified	ASSIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED		82	19b. TELEPHONE NUMBER (include area code) 831-657-3000

#### **Preface**

On October 28, 2004, the President of the United States signed into law the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005*. Section 1061 of that Act enables the National Driver Register (NDR) to be checked for individuals who either (1) have or are seeking access to national security information for purposes of Executive Order No. 12968 or (2) are being investigated for federal employment under authority of Executive Order No. 10450.

This study demonstrates that the NDR has potential for identifying additional significant derogatory information that should be made available to adjudicators when making determinations about whether to place or retain individuals in positions of trust. The NDR data will overcome vulnerabilities by insuring checks of local and state record systems in locations where offenses occur and by providing information about all relevant facts for subjects who have not been forthcoming about negative information in their backgrounds.

The Defense Personnel Security Research Center (PERSEREC) and the National Highway Transportation Safety Administration (NHTSA) of the U.S. Department of Transportation (DOT) should move forward with meetings to develop the policies, procedures, and automated system linkages needed to implement electronic NDR checks for use in federal personnel security background screening.

James A. Riedel Director

## Acknowledgements

PERSEREC would like to thank the National Highway Transportation Authority (NHTSA) for its assistance in conducting the statistical match. In particular, we would like to recognize Christine Holdsworth for highly competent and conscientious contributions of data, advice, and analyses.

#### **Executive Summary**

#### **Purpose of the Study**

On October 28, 2004, the President of the United States signed into law the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005*. Section 1061 of that Act enables the National Driver Register (NDR) to be checked for individuals who either (1) have or are seeking access to national security information for purposes of Executive Order No. 12968 or (2) are being investigated for federal employment under authority of Executive Order No. 10450. The purpose of this study is to assess the value of incorporating checks of the National Highway Transportation Safety Authority's (NHTSA) NDR in Department of Defense (DoD) security clearance background investigations.

The National Driver Register (NDR) is a central index covering all 50 states and the District of Columbia that is maintained by the US Department of Transportation (DOT). According to 49 USC 30304, the chief driver licensing official in each participating state is required to report each individual falling under their jurisdiction:

- (1) Who is denied a motor vehicle operator's license by that state for cause;
- (2) Whose motor vehicle operator's license is revoked, suspended, or canceled by that state for cause; or
- (3) Who is convicted under the laws of that state of any of the following motor vehicle-related offenses or comparable offenses:
  - (a) Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance.
  - (b) A traffic violation arising in connection with a fatal traffic accident, reckless driving, or racing on the highways.
  - (c) Failing to give aid or provide identification when involved in an accident resulting in death or personal injury.
  - (d) Perjury or knowingly making a false affidavit or statement to officials about activities governed by a law or regulation on the operation of a motor vehicle.

#### Methodology

The NHTSA agreed to conduct a statistical match using the NDR to identify the proportion of a sample of DoD security clearance applicants who are indexed in their system as having one or more NDR reportable driving-related issues. The Defense Personnel Security Research Center (PERSEREC) provided the NHTSA with a sample of 23,854 subjects from the population of security clearance investigations opened in calendar years 2002 (CY02) or 2003 (CY03). These years were selected because the NDR only indexes driving violations for three years.

The NHTSA matched the personal identifiers and aliases for this sample against their index and returned a database populated with an indicator of the existence or absence of an NDR issue being recorded in the same states for the same individual as contained in the DoD sample. Additionally, the returned data included an indicator of NDR record matches in any state for each individual in the DoD sample. The matched sample was returned to DoD minus personal identifiers and other variables that could have enabled the DoD to match the NDR data to specific individuals in the DoD population. Variables that were included in the matched sample indicated whether subjects had either (1) self-reported any one of several significant issues or (2) been associated with serious driving offenses or other crimes identified during the course of local or state agency checks.

#### Results

In the 257,067 investigations that opened in 2002 or 2003 and that had valid state data for the location of criminal record checks, based only on LACs, 13,625 record checks representing 12,957 individuals across the 50 states and Puerto Rico resulted in detection of a record of a driving offense that could be reported to the NDR. Based on sample match results, adding the use of the NDR to these LACs would potentially result in the identification of 41,827 subjects with serious driving offense records in at least one state. In other words, without the NDR, investigators are failing to identity approximately two thirds of the identifiable subjects with serious driving-related issues.

#### Recommendations

PERSEREC and the NHTSA of the DOT should initiate meetings to develop the policies, procedures, and automated system linkages needed to implement electronic NDR checks for use in federal personnel security background screening.

## **Table of Contents**

Introduction	1
Methodology	3
Sampling Strategy	6
Coding Results of "Any Criminal Offense" Using ROIs of Criminal Record Checks	7
Coding Results of "Any Driving Offense" Using ROIs of Criminal Record Checks	7
Coding of "Any Self-Report" Responses to Questions about Significant Issues _	8
Coding Results of the NDR Match	9
Method of Analysis	9
Results	9
Comparison of LACs and the NDR in States Where Investigators Knew to Conduct LACs	9
Comparison of the Effectiveness of LACs and the NDR Checks Regardless of Where Investigators Knew to Conduct LACs	10
Distribution of Types of Offenses in the NDR for the Sample	11
Discussion and Recommendations	12
References	15
Appendices	
Appendix A: NDR For Cause Withdrawal and Conviction Codes	A-1
Appendix B: Method of Coding Results of Record Checks	B-1
Appendix C: Complete Statistical Match Results and Analysis, Record Level, by State	C-1
Appendix D: Complete Statistical Match Results and Analysis, Individual Level, by State	D-1

	endix E: Complete Statistical Match Results and Analysis, Aggregated ubject, Across All States	E-1
	List of Tables	
1.	Demographic Characteristics	4
2.	Case Summary	5
3.	Distributions for Control Variables	6
4.	Comparison of Results of LACS with NDR Checks, Controlling for State in Which LACs Conducted	10
5.	Comparison of Number of Subjects Identified by LACs and NDR Checks Regardless of Where LACs Were Conducted	11
6.	Offenses Indexed in the NDR for the Sample	12
A-1.	NDR For Cause Withdrawal and Conviction Codes	_ A-3
C-1.	Complete Statistical Match and Analysis Results, Record Level	C-3
D-1.	Complete Statistical Match and Analysis Results, Subject Level	_ D-3
E-1.	Sample Totals, Aggregated by Subject	E-3
E-2.	Population Totals, Aggregated by Subject	E-3
E-3.	Population Estimates	E-4
	List of Figures	
B-1.	Example of Reports of Investigation When Criminal Records Are Found	_B-3
B-2.	Example of Reports of Investigation When Criminal Records Are Not Found	B-4

#### Introduction

On October 28, 2004, the President of the United States signed into law the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005*. Section 1061 of that Act enables the National Driver Register (NDR) to be checked for individuals who either (1) have or are seeking access to national security information for purposes of Executive Order No. 12968 or (2) are being investigated for federal employment under authority of Executive Order No. 10450. The purpose of this study is to assess the value of incorporating checks of the National Highway Transportation Safety Authority's (NHTSA) NDR in Department of Defense (DoD) security clearance background investigations.

The National Driver Register (NDR) is a central index covering all 50 states and the District of Columbia that is maintained by the US Department of Transportation. According to 49 USC 30304, the chief driver licensing official in each participating state is required to report each individual falling under their jurisdiction:

- (1) Who is denied a motor vehicle operator's license by that state for cause;
- (2) Whose motor vehicle operator's license is revoked, suspended, or canceled by that state for cause; or
- (3) Who is convicted under the laws of that State of any of the following motor vehicle-related offenses or comparable offenses:
  - (a) Operating a motor vehicle while under the influence of, or impaired by, alcohol or a controlled substance.
  - (b) A traffic violation arising in connection with a fatal traffic accident, reckless driving, or racing on the highways.
  - (c) Failing to give aid or provide identification when involved in an accident resulting in death or personal injury.
  - (d) Perjury or knowingly making a false affidavit or statement to officials about activities governed by a law or regulation on the operation of a motor vehicle.

PERSEREC and the DOT National Highway Transportation Safety Authority (NHTSA) conducted a statistical match to assess the value of the NHTSA's National Driver Register (NDR) for DoD personnel security investigations (PSIs). The NDR contains an index to state records of serious driving-related violations which may be germane to making security clearance determinations. The purpose of this report is to evaluate the value of the NDR for personnel security clearance background investigations, describe the statistical match process used to assess the potential value of the NDR, and report the extent to which use of the NDR may add valuable data to PSIs.

The NDR is a central index of individuals whose driver's licenses have been denied, revoked, suspended, or canceled for cause or who have been convicted of serious driving-related offenses such as driving while intoxicated, racing, leaving the scene of an accident, perjury, or use of a vehicle in the commission of a felony. (For a full list of offenses, refer to Appendix A). The NDR traditionally has been used by state licensing authorities and employers of persons providing transportation services to determine whether applicants have valid licenses or have been convicted of offenses that may bear on their employability or ability to be licensed.

The NDR would also be of use in the screening of persons for positions of trust. In keeping with Executive Order 12968, authorities are required to grant national security clearances only to trustworthy and reliable people. All the persons reported to the NDR have at least one offense that relates directly to adjudication criteria. For example, drug and alcohol problems may be indicated by arrests for driving while under the influence. Perjury clearly relates to standards of personal conduct to be truthful. Use of a vehicle in the commission of a felony is a driving-related offense that may lead to detection of a serious criminal offense that might have otherwise remained unknown. Protecting national security by ensuring that only qualified personnel are granted access to sensitive information and facilities is in the best interests of all federal agencies, not to mention the people of the United States.

Currently, identification of the types of serious driving-related offenses described above relies on subjects self-disclosing them and on checks of local and state law enforcement databases. Investigators go to locations where applicants self-disclose offenses and/or to locations where subjects are known to have lived, worked, or attended school for a scope of time specified for their type of security clearance background investigation.

The problem with this strategy is that many offenses of concern may occur in places that fall outside the scope of investigative requirements but within the scope of adjudicative consideration. For example, an individual who lives, works, and goes to school in San Jose, CA, may be charged with DUI while partying in San Francisco, a popular destination a little over an hour away. Under current investigative requirements (DoD 5200-R), records checks would not be conducted in San Francisco if the individual has neither lived, worked, nor gone to school there during the years covered by the investigation. Unless the individual self-reports the offense, investigators and adjudicators would not know about it. Because it is statewide and even national in scope, the NDR holds promise for improving the effectiveness of background screening of personnel for positions of trust.

-

<sup>&</sup>lt;sup>1</sup> The NDR does not contain the actual records of individuals, but serves as a pointer system to state departments of transportation or motor vehicles where the complete records can be requested (NDR Act of 1982, Pub. L. 97-364, 96 Stat. 1740, as amended (49 U.S.C. 30301 et seq.)). This system is called the National Driver Register Problem Driver Pointer System (56 FR 41394 (1991)). It is fully automated and provides responses to electronic queries instantaneously (23 CFR Part 1327 (2004)). The Pointer System contains personal identifiers of problem drivers, states in which reportable problems occurred, and violation codes used by all states and the NDR (see Appendix A).

Relying on self-reports is also problematic. Research by PERSEREC has shown that a significant proportion of subjects do not self-disclose offenses as required in their security clearance applications (Buck & Reed, 2003; Buck & Rose, 2004). For these reasons, access to the NDR would, through an efficient means, improve the effectiveness of personnel security clearance investigations by surfacing information that may bear on individuals' suitability and trustworthiness for positions of trust and access to classified information.

Single-source automated queries by DoD of the NDR might also alleviate some of the existing burden on state driver-licensing personnel. DoD envisions having a central electronic interface between DoD and NDR via a means such as the Automated Continuing Evaluation System (ACES). In addition to the benefits applicable for background investigations, an electronic link could also potentially alleviate future and any existing burdens on state driver-licensing officials to respond to driving-related record requests from investigators requesting record checks during the course of federal national security clearance investigations. Specific state agencies would only be queried in the event a record is identified in the NDR pointer system.

Another advantage of using the NDR is that it could serve as another means of deterring problematic driving among cleared personnel. If DoD and other agencies start to use this information in making security clearance determinations, transportation safety will be enhanced because the 3.5 million people with security clearances will want to make sure they do not get into clearance trouble based on driving misconduct. They know that they will ultimately be held accountable to answer for driving violations in the course of their security clearance investigations, reinvestigations, and continuous monitoring.

Before Section 1061 of the *Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005* was signed into law, the DoD with the cooperation of the NHTSA began conducting a statistical match to determine the extent to which the NDR could help identify serious vehicle code violations and convictions that are presently being missed by current methods for conducting security clearance background investigations. The following section describes the methodology used to conduct the match. Results and recommendations follow.

### Methodology

The data used in this study were obtained from three sources: (1) Reports of Investigation (ROIs) for security clearance applicants whose cases were opened by the Defense Security Service (DSS) in calendar year 2002 or 2003, (2) subjects' responses on their Electronic Personnel Security Questionnaires (EPSQs) as recorded in the DoD Case Control Management System (CCMS), and (3) the United States Department of Transportation (DOT) National Highway Transportation Safety Authority (NHTSA) National Driver Registry (NDR).

There were 256,849 unique individuals in the population, from which a sample of 23,854 individuals was drawn. Summaries of the demographic characteristics of these individuals for the population and the sample are provided in Table 1. ROIs provided the data on years cases were opened, the states with which records are associated, subject

Table 1
Demographic Characteristics<sup>a</sup>

	Рори	lation	Sam	ple
	N=25	(N=256,849)		,854)
	N	%	n	%
Age				
Under 20	37,924	14.77	2,982	12.50
20 - 29	67,722	26.37	7,501	31.45
30 - 39	68,203	26.55	6,806	28.53
40 - 49	51,861	20.19	4,437	18.60
50 - 59	25,300	9.85	1,816	7.61
60 - 69	5,317	2.07	293	1.23
70 or older	522	0.20	19	0.08
Sex				
Female	43,799	17.05	3,078	12.90
Male	209,682	81.64	20,460	85.77
Unknown	3,368	1.31	316	1.32
Employee Type				
Civilian	987	0.38	68	0.29
Industrial	86,725	33.76	6,900	28.93
Military	169,137	65.85	16,866	70.79

<sup>&</sup>lt;sup>a</sup>Percentages may not total 100% due to rounding.

social security number, name, gender, age, place of birth, military status (civilian, military, or industrial), type of investigation (SSBI, SSBI-PR, NACLC-C, NACLC-S, etc.), and whether the case was considered "added coverage" "issue" or "nonissue" by DSS.

This study included only ROIs for cases that opened in 2002 or 2003 and that had valid state data for the location of criminal record checks. The resulting dataset had 409,265 cases, where a case equals one record check. Subjects may appear more than once in the data, since they may be associated with more than one record check.

The population of 256,849 individuals is associated with 257,067 cases; the sample of 23,854 individuals is associated with 23,863 cases. A few individuals are associated with multiple cases opening within the time period of the study: CY02 and

CY03. Table 2 presents the distributions of cases as well as the distribution of issue, nonissue, and added coverage cases in the population and sample.

Table 2 Case Summary<sup>a</sup>

	Рори	$Population^b$		$ple^b$
	N=2.	57,067)	(n=23,863)	
	N	%	n	%
Case Type				
NACLC-Trustworthiness	578	0.22	46	0.19
NACLC-Confidential	2,356	0.92	233	0.98
NACLC-PR-Confidential	534	0.21	32	0.13
NACLC-Secret	128,712	50.07	12,600	52.80
NACLC-PR-Secret	58,442	22.73	5,338	22.37
SSBI	30,652	11.92	3,130	13.12
SSBI-PR	34,825	13.55	2,303	9.65
Other	968	0.38	181	0.76
Total	257,067	100.00	23,863	100.00
Issue				
Nonissue	207,150	80.58	15,098	63.27
Issue case	48,279	18.78	8,486	35.56
Added Coverage	1,638	0.64	279	1.17
Total	257,067	100.00	23,863	100.00

<sup>&</sup>lt;sup>a</sup>Percentages may not total 100% due to rounding.

Note that Table 2 shows disproportionately more issue cases in the sample than in the population. As will be described in the next section, cases with offenses detected in LACs were intentionally oversampled. The distribution of case type, however, is very similar between the population and sample. The sample has a slightly lower proportion of SSBI and SSBI-PRs (approximately 25%), and a slightly higher proportion of NACLC-Secret investigations (approximately 75%), reflecting the differences in likelihood of issues occurring in these kinds of cases.

Case population and sample sizes are larger than individual population and sample sizes because some individuals have multiple investigations within the time period under study.

#### **Sampling Strategy**

Initially, PERSEREC was interested in running a statistical match on the entire population of cases opened in CY02 and CY03. This strategy was not practical for the NHTSA, however, so a target sample of approximately 30,000 DoD record checks was drawn for comparison with the NDR. This sample size was the largest that the NHTSA indicated they could accommodate.

Sampling was conducted randomly within states, as well as within certain conditions reflecting whether or not subjects had issues of security concern identified during the course of their investigation. Most of these issues of concern pertained to criminal conduct; some pertained to significant financial distress or civil judgments. (For more information, see the Section entitled Coding of "Any Self-Report" Responses to Questions about Significant Issues," below.)

Two other variables were coded for subjects within each state. One was whether investigators' written ROIs indicated that subjects had any type of criminal citation, arrest, or conviction ("Any Criminal Offense"). The second was whether this criminal issue included a driving offense of the type that is authorized to be reported to the NDR ("Any Driving Offense"). Table 3 shows the distributions for these variables for the population and for the sample. More specific information about how they were coded is provided in the sections following.

Table 3
Distributions for Control Variables<sup>a</sup>

	<i>Population</i> (N=256,849)		Sam <sub>1</sub> (n=23,	
	N	%	n	%
Any Self-Report				
No	204,137	79.5	12,241	51.3
Yes	51,867	20.2	11,613	48.7
Missing	845	0.3	0	0.0
Any Criminal Offense				
No	216,240	84.2	10,850	45.5
Yes	40,609	15.8	13,004	54.5
Missing	0	0.0	0	0.0
Any Driving Offense				
No	240,795	93.7	19,416	81.4
Yes	13,049	5.1	4,159	17.4
Missing	3,005	1.2	279	1.2

<sup>&</sup>lt;sup>a</sup>Percentages may not total 100% due to rounding.

The resulting DoD dataset had 40,742 record checks, representing 23,854 unique individuals. The DoD dataset was sent to NHTSA for matching. Each individual in the DoD dataset was identified by first, middle, and last name, aliases, date of birth, and social security number. Two additional data fields were appended to the dataset by NHTSA. Those data fields indicated whether each subject: (1) had a driving offense record indexed in the NDR from the same state where security clearance investigators conducted the record check submitted for matching by the NDR, and (2) had a driving offense indexed in the NDR from any state, regardless of whether security clearance investigators conducted checks in those states. In addition to those two data elements added by NHTSA, the returned data included the variables "Any Criminal Offense," "Any Driving Offense," and "Any Self-Report" from the original data submitted by DoD. All personal identifiers were removed by the NHTSA staff prior to returning the data to PERSEREC.

#### Coding Results of "Any Criminal Offense" Using ROIs of Criminal Record Checks

Coding of LACs was done using Peak Software's ALICE data mining application. ALICE was programmed to search and flag ROIs for key words pertaining to criminal and driving offenses. The resulting data were coded as having any kind of offense record or no record using logical indicators such as field length and patterns in phrases consistently used by investigators such as "was arrested on," "paid fine of," "dismissed," "plead guilty," "was acquitted," or "was convicted." These ROI results were then reviewed. Miscoded data were cleaned both manually and electronically using Microsoft Visual Basic macros. More detailed descriptions of the method of coding ROIs are provided in Buck (2004) and Buck and Rose (2004). An excerpt from Buck (2004) is provided in Appendix B.

#### Coding Results of "Any Driving Offense" Using ROIs of Criminal Record Checks

Subjects categorized as having any kind of driving offenses discovered during their local and state record checks were identified through procedures similar to those used to identify subjects with any kind of criminal involvement. For the driving offenses, however, the focus was limited to those types of offenses covered by the NDR, and to the time period that NHTSA is authorized to retain such records. Subjects identified as having driving offenses in the original DoD data set had local agency record checks that surfaced one or more of the following types of events: drinking and driving; driving without a license or on a suspended or revoked license; reckless driving; hit and run.

The above list does not include all offenses covered by the NDR. The reason for this has to do with ambiguities in interpretation of text in ROIs. Only offenses that clearly fell into a clearly reportable NDR category were included. Additionally, some offenses occurred so rarely in the DoD CCMS database that they could not be used in sampling without enabling the NDR-provided data to be linked to specific individuals regardless of the exclusion of personal identifiers. One of the conditions of the study for NHTSA's participation was that they would not return NDR match results if these could be associated with particular individuals.

Additionally, only driving offenses occurring within 3 years preceding the date the sample was drawn (July 2004) were included, since only offenses 3 years old or less are included in the NDR. Therefore, only cases having driving offenses that occurred during the years 2001, 2002, or 2003 were coded as having a driving-related offense.

#### Coding of "Any Self-Report" Responses to Questions about Significant Issues

In addition to controlling for subjects known to have arrest or conviction records for any criminal offense and for the aforementioned driving offenses, the study controlled for the extent to which subjects self-reported significant issues on the EPSQs. The following yes/no questions on the EPSQ were selected for each individual in the data:

- Have you ever been charged with or convicted of any felony offense?
- Have you ever been charged with or convicted of a firearms or explosives offense?
- Are there currently any charges pending against you for any offense?
- Have you ever been charged with or convicted of any offense(s) related to alcohol or drugs?
- In the last 7 years, have you been subject to court martial or other disciplinary proceedings under the Uniform Code of Military Justice?
- In the last 7 years, have you been arrested for, charged with, or convicted of, any offense(s) not listed in modules 21, 22, 23, 24, or 25? (Leave out traffic fines of less than \$150.00 unless the violation was alcohol or drug related.)
- In the last 7 years, have you filed a petition under any chapter of the bankruptcy code (to include Chapter 13)?
- In the last 7 years, have you had your wages garnished for any reason?
- In the last 7 years, have you had any property repossessed for any reason?
- In the last 7 years, have you had a lien placed against your property for failing to pay taxes or other debts?
- In the last 7 years, have you had any judgments against you that have not been paid?
- In the last 7 years, have you been a party to any public record civil court actions not listed elsewhere on this form?

An indicator was created ("Any Self-Report") which was true if the subject gave a "yes" response to any of the above EPSQ items and false if the subject responded "no" to all of the selected items. The purpose of the Any Self-Report variable was to provide another layer of control for whether subjects were issue cases or not.

#### **Coding Results of the NDR Match**

As previously noted, the NHTSA returned results of the match for the sample reported in two ways. One measure indicated whether the NDR had a record in the same state where a given LAC was conducted. The second measure indicated whether the NDR had a record for a subject in any state, regardless of where LACs were conducted. The first measure provides a means of assessing the value of the NDR in states where investigators knew to conduct LACs. The second measure indicates the extent to which the NDR found more or less information than obtained by DoD's LAC strategy as a whole, regardless of where LACs were conducted.

#### **Method of Analysis**

To assess the degree of consistency between the NDR and LACs conducted within given states, the proportion of records and subjects with and without evidence of any self-reported significant issue, any criminal record, and/or any driving offense were calculated for both the sample and the population within each state. The percent of sample subjects identified by the NHTSA as having an NDR record within a given state was calculated for each condition for the sample. These percentages were then applied to relevant conditions for the population to arrive at an estimate of the number of additional records and individuals who would be expected to identified by the NDR as having significant driving problems. These additional NDR hits reflect issues of security concern that would have otherwise gone undetected using existing procedures for conducting local and state criminal record checks.

#### **Results**

# Comparison of LACs and the NDR in States Where Investigators Knew to Conduct LACs

The sample set sent to the NHTSA included 4,159 subjects who were identified by 4,280 local and state agency checks as having significant driving issues. NDR checks for the sample identified 1,393 additional individuals with significant driving issues. Therefore, out of the sample for the study, using both LACs and NDR, 5,870 subjects are believed to have significant driving records. Of these 5,870 subjects with problematic driving records, a total of 71% were identified by local and state agency checks whereas 59% were identified by NDR checks. The NDR and local and state agency checks in common identified 2,056 subjects, or 27% of possible driving offenders. The proportion identified by LACS relative to the NDR is higher in the sample due to oversampling of subjects with serious driving records.

The proportions of subjects identified by the NDR within states for the sample were applied to the population record and subject totals to derive the data reported under the population header in Table 4. Without the NDR, investigators identified 13,607 subjects with driving records that could be reported to the NDR. With added use of the

NDR, 31,251 would have been identified, a potential increase of approximately 17,644 subjects. Of all subjects expected to have serious driving records based on LACs and checks of the NDR, the NDR would be expected to identity 74% while LACs would identify 44%. The data used in calculations for Table 4 are provided in Appendix C (by state and by record check) and Appendix D (aggregated within states by subject).

Table 4
Comparison of Results of LACS with NDR Checks,
Controlling for State in Which LACs Conducted

	Sample		Population	
	Records	Subjects <sup>a</sup>	Records	Subjects <sup>a</sup>
Total number identified by LACs	4,280	4,159	13,625	13,607
Total number identified by NDR	3,739	3,449	23,320	23,287
Total number identified in common	1,738	2,056	5,669	5,661
Total number identified by LACs & NDR combined	6,281	5,870	31,276	31,251
Pct. of combined total identified by LACs	68.1	70.9	43.6	43.6
Pct. of combined total identified by NDR	59.5	58.8	74.6	74.5

<sup>&</sup>lt;sup>a</sup> Includes 558 subjects for whom significant driving records were found by LACs conducted in more than one state.

The relative proportion of records and subjects identified by LACs and by the NDR are reversed when comparing results for the sample and the population. This reversal is due to the sampling methods used for the study. In selecting cases for the statistical match, cases with any known criminal offense or any driving offense were oversampled to get a sense of the extent to which known records would be identified by the NDR. The logic of the analysis, however, focused on the percentages of the clean populations within each state that were identified as having significant driving records by the NDR. Once these percentages were extrapolated to the population, controlling for state populations, the number of records and subjects identified by the NDR was relatively higher.

The above results apply only to the record checks actually conducted by DSS or OPM investigators and, therefore, only apply to those checks in states, counties, and municipalities where the investigators knew to conduct a LAC. The value of the NDR, however, is that it can identity offenders even in states where investigators have no indication based on subject self-reports or investigative requirements that a LAC should be conducted.

# Comparison of the Effectiveness of LACs and the NDR Checks Regardless of Where Investigators Knew to Conduct LACs

Table 5 shows the number of subjects over all states who were identified as having at least one record in any state by LACs versus the number of subjects identified as having at least one record in any state by the NDR. Unlike the analysis for Table 4, for

this part of the study, it did not matter whether the NDR identified subjects in the same states as those where LACs were conducted, nor whether LACs were conducted in a given state. Where Table 4 presents the comparison of NDR and LACs for states where investigators knew to conduct LACs, Table 5 shows how the NDR compares to LACs in identifying subjects as having at least one significant driving record, regardless of where it was incurred.

Based on the higher proportion of all offenders identified by NDR checks relative to the proportion observed in Table 4, the results from Table 5 show that NDR checks identify many subjects with significant driving records in states where investigators did not know to conduct record checks. For the population in the study, using both LACs and the NDR, 42,053 subjects would have been identified as having at least one significant driving record in at least one state. Of these 42,053 subjects, 84.3% (n=35,439) would have been identified by NDR checks versus only 31.0% (n=13,049) by LACs. Breakdowns of subjects identified by LACs and the NDR for the sample and population within the different conditions in the study (any criminal offense, any driving offense, and any self-report) are provided in Appendix E.

Table 5 Comparison of Number of Subjects Identified by LACs and NDR Checks Regardless of Where LACs Were Conducted

	Sample	Population
Total number identified by LACs	4,159	13,049
Total number identified by NDR	5,538	35,439
Total number identified in common	2,056	6,435
Total number identified by LACs & NDR combined	7,641	42,053
Pct. of combined total identified by LACs	54.4	31.0
Pct. of combined total identified by NDR	72.5	84.3

#### Distribution of Types of Offenses in the NDR for the Sample

Table 6 presents the distribution of offenses that are indexed with the NHTSA for 5,538 subjects with NDR records in the sample. With 27,702 total offenses in the sample, each individual has an average of 27,702/5,538 or 5 convictions. As mentioned in section one, only certain offenses trigger reporting to the NDR; these have been bolded in Table 6. They reflect offenses that are either specifically required to be reported to the NDR or are of a nature likely to lead to withdrawal of driving licenses, which would then have to be reported to the NDR. The nonbolded offenses are additional factors that may have accompanied a more serious conviction or contributed to withdrawal of license to drive.

11

#### **Discussion and Recommendations**

This study has shown that the NDR has good potential for identifying significant driving-related derogatory information that should be available to adjudicators and decisionmakers when making determinations about whether to place or retain individuals in positions of trust. Without the NDR, investigators currently may be failing to identify three-fourths of the subjects with significant driving problems. The NDR data will help counteract vulnerabilities present when investigators fail to check record systems in locations where offenses occur and when overlooking subjects who have not been forthcoming about negative information in their backgrounds.

Table 6
Offenses Indexed in the NDR for the Sample

Officiacs mucaeu in the N	DK for the	Sampic
Offense	n	%
Speeding	10,346	37.3
Invalid license	3,071	11.1
Alcohol	2,049	7.4
Failure to obey	1,806	6.5
Equipment issue	1,661	6.0
Failure to appear	1,301	4.7
Reckless	1,238	4.5
Alcohol or drugs	1,207	4.4
No insurance	1,063	3.8
Registration issue	795	2.9
Other documentation issue	735	2.7
Wrong way	355	1.3
Weaving	302	1.1
Inspection issue	271	1.0
Failure to yield	263	0.9
Tailgate	191	0.7
Drugs	170	0.6
Failure to pay	167	0.6
Passing	150	0.5
Signals	131	0.5
Hit & run	114	0.4
Violate restrictions	87	0.3
Other	86	0.3
Parking issue	44	0.2
Identity fraud	39	0.1
Evading	30	0.1
Litter	11	0.0
Other crime	9	0.0
Vehicular assault	4	0.0
Felony	2	0.0
Misdemeanor	2	0.0
Child support	1	0.0
Habitual offender	1	0.0
Total	27,702	100.0

Furthermore, the NDR alone appears to be more effective (not to mention efficient) in identifying individuals with potentially significant driving-related derogatory information than existing procedures for conducting LACs. Once NDR checks are operational, ongoing research should be conducted to determine whether NDR checks could reliably replace time-consuming and potentially less effective and more costly local and state agency checks when those checks are conducted for the sole purpose of investigating driving records. As Buck (2004) showed, in some states such as Vermont and Iowa, investigators are checking state departments of transportation or motor vehicles in addition to criminal repositories. Use of the NDR could replace these checks and improve coverage by adding checks for the same individuals for every state in the country. At the same time, caution should be used in supplanting local and state agency checks with National Driver checks since results from this study showed that the NDR failed to identify a significant percentage of cases identified by local and state agency checks.

Finally, the NDR checks can be conducted through a fully automated process for all subjects. When the NDR has a record indexed for an individual, investigators would still need to follow up with the respective state to obtain details about the particular offense(s). Follow-up record checks would only need to be conducted, however, on 10% to 15% of the population. While some of the follow-up record checks would require manual processing, many could be conducted through electronic queries, depending on individual states' capabilities.

PERSEREC and the NHTSA should initiate meetings to develop the policies, procedures, and automated system linkages needed to implement electronic NDR checks for use in federal personnel security background screening.

#### References

- Buck, K.R. (2004). Comparative productivity of criminal record checks by federal investigators and contracts. (Tech. Rep. 05-3). Monterey, CA: Defense Personnel Security Research Center.
- Buck, K.R., & Rose, A.E. (2004). *Crime self reporting study: Phase I.* (Tech. Rep. 05-1). Monterey, CA: Defense Personnel Security Research Center.
- Buck, K. R., & Reed F. M. (2003). Reliability of centralized criminal record repository checks in lieu of local criminal justice agency checks in four U.S. states: California, Florida, Pennsylvania, and Indiana with F. Michael Reed. (Tech. Rep. 03-1). Monterey, CA: Defense Personnel Security Research Center.
- Federal Register: March 31, 2004 (Volume 69, Number 62) re: National Highway Traffic Safety Administration, 23 CFR 1327, Docket No. NHTSA-04-17326] RIN 2127-AI45, Procedures for participating in and receiving data from the National Driver Register Problem Driver Pointer System.

# Appendix A

**NDR** for Cause Withdrawal and Conviction Codes

#### NDR for Cause Withdrawal and Conviction Codes

The National Driver Register Problem Driver Pointer System uses the set of codes created by the American Association of Motor Vehicle Administrators (AAMVA) for the exchange of conviction and withdrawal information between States. These codes are known as the AAMVA Code Dictionary (ACD). The list of codes and their descriptions follows.

Table A-1
NDR For Cause Withdrawal and Conviction Codes

A04	Driving under the influence of alcohol with BAC at or over .04
A08	Driving under the influence of alcohol with BAC at or over .08
A10	Driving under the influence of alcohol with BAC at or over .10
A11	Driving under the influence of alcohol with BAC at or over (detail field required)
A12	Refused to submit to test for alcohol - Implied Consent Law
A20	Driving under the influence of alcohol or drugs
A21	Driving under the influence of alcohol
A22	Driving under the influence of drugs
A23	Driving under the influence of alcohol and drugs
A24	Driving under the influence of medication not intended to intoxicate
A25	Driving while impaired - ability definitely impaired
A26	Drinking alcohol while operating a vehicle
A27	Driving after drinking - level of intoxication or impairment not known
A30	Possession
A31	Illegal possession of alcohol
A32	Illegal possession of alcohol or drugs
A33	Illegal possession of drugs (controlled substances)
A34	Illegal possession of weapon including firearm
A35	Possession of open alcohol container
A40	Aiding in violation of ignition interlock or immobilization device
A41	Driver violation of ignition interlock or immobilization device
A50	Motor vehicle used in the manufacturing, distributing, or dispensing a controlled
	substance
A51	Transporting liquor illegally
A52	Transporting liquor to a minor
A60	Underage Convicted of Drinking and Driving at .02 or higher BAC
A61	Underage Administrative Per Se - Drinking and Driving at .02 or higher BAC
A90	Administrative Per Se for .10 BAC
A94	Administrative Per Se for .04 BAC
A98	Administrative Per Se for .08 BAC
B01	Hit and run - failure to stop and render aid after accident
B02	Hit and run - failure to stop and render aid after accident - Fatal accident
B03	Hit and run - failure to stop and render aid after accident - Personal injury accident
B04	Hit and run - failure to stop and render aid after accident - Property damage accident

B05	Leaving accident scene before police arrive
B06	Leaving accident scene before police arrive - Fatal accident
B07	Leaving accident scene before police arrive - Personal injury accident
B08	Leaving accident scene before police arrive - Property damage accident
B09	Refusal to reveal identity after accident
B10	Refusal to reveal identity after accident - Fatal accident
B11	Refusal to reveal identity after accident - Personal injury accident
B12	Refusal to reveal identity after accident - Property damage accident
B13	Failure of duties upon damaging unattended vehicle or injuring animal
B20	Driving while license withdrawn
B21	Driving while license barred
B22	Driving while license canceled
B23	Driving while license denied
B24	Driving while license disqualified
B25	Driving while license revoked
B26	Driving while license suspended
B27	General, driving while an out of service order is in effect.
B28	Driving while registration canceled
B29	Driving while registration suspended
B30	Permit unlicensed person to drive
B40	Possess or provide counterfeit or altered document
B41	Possess or provide counterfeit or altered driver license (includes DL, CDL, and Instruction
	Permit) or ID
B42	Possess or provide counterfeit or altered registration or title
B43	Missing, defaced, or obscured license plates
B44	Mutilated document
B45	Mutilated driver license (includes DL, CDL, and Instruction Permit) or ID
B46	Mutilated registration card or title
B50	Expired or no document (or item) which is required
B51	Expired or no driver license (includes DL, CDL, and Instruction Permit)
B52	Expired or no emissions inspection
B53	Expired or no license plates or decal/sticker
B54	Expired or no registration or title
B55	Expired or no vehicle safety inspection
B60	Failed to file document or report as required
B61	Failed to file accident report
B62	Failed to file change of address or name
B63	Failed to file future proof of financial responsibility
B64	Failed to file insurance certification
B65	Failed to file medical certification/disability information
B70	Failed to show document as required
B71	Failed to show certificate of weight
B72	Failed to show driver license (includes DL, CDL, and Instruction Permit)
B73	Failed to show emissions or vehicle (safety) inspection

D74	T-11-14111
B74	Failed to show insurance certification
B75	Failed to show operator's (driver's) log
B76	Failed to show registration
B77	Failed to show registration, title or driver license (includes DL, CDL, and Instruction
Doo	Permit)
B80	Failed to surrender driver license (includes DL, CDL, and Instruction Permit)
B81	Failed to surrender driver license, registration, plates, or title
B82	Failed to surrender registration, plates, or title
B83	False report
B84	False report of accident
B85	False report of emissions inspection
B86	False report of odometer reading or disclosure
B87	False report of Operator's (driver's) log
B88	False report of theft
B89	False report of vehicle (safety) inspection
B90	Failed to provide or submit title transfer documents
B91	Improper classification or endorsement on driver license (includes DL, CDL, and
	Instruction Permit)
B92	Loan driver license (includes DL, CDL, and Instruction Permit) to another person
B93	Loan registration or plates to another person
D01	Misrepresentation of identity or other facts
D02	Misrepresentation of identity or other facts on application for driver license (includes DL,
	CDL, and Instruction Permit)
D03	Misrepresentation of identity or other facts on application for handicap permit/plates
D04	Misrepresentation of identity or other facts on application for registration or title
D05	Misrepresentation of identity or other facts to avoid arrest or prosecution
D06	Misrepresentation of identity or other facts to obtain alcohol
D07	Possess multiple driver licenses (includes DL, CDL, and Instruction Permit)
D10	Manufacture or make false driver license (includes DL, CDL, and Instruction Permit)
D11	Manufacture or make false emissions or vehicle (safety) inspection certificates
D12	Manufacture or make false registration or title
D15	Show or use improperly - Document (or item) not specified
D16	Show or use improperly - Driver license (includes DL, CDL, and Instruction Permit)
D17	Show or use improperly - Emissions or vehicle (safety) inspection
D18	Show or use improperly - Insurance certification
D19	Show or use improperly - Operator's (driver's) log
D20	Show or use improperly - Registration, plates, or decal/sticker
D21	Show or use improperly - Registration or title
D25	Use another's driver license (includes DL, CDL, and Instruction Permit)
D26	Use another's registration, plates, or title
D27	Violate limited license conditions
D28	Violate limits of registration (manufacturer, transporter, dealer, farm, antique, etc.)
D29	Violate restrictions of driver license (includes DL, CDL, and Instruction Permit)
D35	Failure to comply with financial responsibility law

Dac	Tailung to maintain na suine d liabilite-in-susa
D36	Failure to maintain required liability insurance
D37	Failure to pay for damages or make installment payment
D38	Failure to post security or obtain release from liability
D39	Unsatisfied judgment
D40	Failure to appear
D41	Failure to appear for hearing or mandatory appearance
D42	Failure to appear for or complete department investigations
D43	Failure to appear for or complete exam/re-exam
D44	Failure to appear for or complete required courses
D45	Failure to appear for trial or court appearance.
D50	Failure to make required payment.
D51	Failure to make required payment of child support
D52	Failure to make required payment of fee
D53	Failure to make required payment of fine and costs
D54	Failure to make required payment of tax
D55	Failure to make required payment of toll
D65	Depositing harmful (including injurious and burning) substance on traffic way
D66	Failure to remove harmful substance from traffic way
D67	Littering from a motor vehicle
D68	Throwing from vehicle any harmful substance
D70	Driver's view obstructed
D71	Exceeding hours on duty limitations
D72	Inability to control vehicle
D73	Obscuring, tampering with, or illegally displaying traffic control devices, warning, or
	instructions
D74	Operating a motor vehicle improperly because of drowsiness
D75	Operating a motor vehicle improperly due to physical or mental disability
D76	Perjury
D77	Sex offense in a motor vehicle
E01	Operating without equipment as required by law
E02	Operating without brakes as required by law
E03	Operating without HAZMAT safety equipment as required by law
E04	Operating without HAZMAT placards/markings as required by law
E05	Operating without lights as required by law
E06	Operating without school bus equipment as required by law
E20	Use of equipment prohibited by law
E21	Use of colored lights and/or siren prohibited by law
E22	Use of emergency vehicle markings prohibited by law
E23	Use of radar or laser detector prohibited by law
E24	Use of vehicle lights prohibited by law
E30	Defective equipment
E31	Defective brakes
E32	Defective emissions control device
E33	Defective HAZMAT safety devices
L33	Detective 1172211711 safety devices

E34	Defective lights
E35	Defective or noisy exhaust system or muffler
E36	Defective school bus equipment
E37	Defective tires
E50	Failure to use equipment as required
E51	Failure to use brakes
E52	Failure to use disabled vehicle lights, reflectors, or flares as required
E53	Failure to use HAZMAT safety devices as required
E54	Failure to use headlight dimmer as required
E55	Failure to use lights as required
E56	Failure to use school bus safety equipment as required
E57	Failure to use snow tires or chains as required
E70	Equipment used improperly or obstructed
E71	Brakes used improperly
E72	Emissions control device used improperly or obstructed
E73	Equipment used improperly - making excessive noise
E74	Exhaust system used improperly or obstructed
E80	Failure to correct defects after inspection failure or notice
F01	Safety equipment not used properly as required
F02	Child or youth restraint not used properly as required
F03	Motorcycle safety equipment not used properly as required
F04	Seat belt not used properly as required
F05	Carrying unsecured passengers in open area of vehicle
F06	Improper operation of or riding on a motorcycle
F10	Exceeding or violating size, weight, or passenger/cargo limits
F11	Exceeding or violating passenger or cargo limits of vehicle/truck
F12	Exceeding or violating size limits of vehicle/truck
F13	Exceeding or violating weight limits of vehicle/truck
F14	Exceeding or violating passenger or cargo limits of motorcycle
F15	Exceeding or violating size limits of road/bridge/tunnel
F16	Exceeding or violating weight limits of road/bridge/tunnel
F20	Failure to weigh vehicle or stop at weigh station
F21	No or improper trip permit
F22	No warning for projecting load
F23	Spilling, dragging, unsecured or unsafe load
F24	Violation of excess size/weight permit
F30	Failure to place red flags or flares
F31	Failure to set brake(s)
F32	Non emergency stop
F33	Parking in a handicap zone
F34	Stopping, standing, or parking: obstructing or impeding traffic
F35	Stopping, standing, or parking where prohibited or improper
F40	Improper vehicle used on roadway
F41	Operate or permit vehicle where prohibited or not authorized

orcement
ad-
racks at a
iving
ailroad-
:
n private
f

3.640	T 1 2
M40	Improper lane or location
M41	Failure to keep in proper lane
M42	Improper or erratic (unsafe) lane changes
M43	Ran off road
M44	Improper lane or location - crossover
M45	Improper lane or location - crosswalk
M46	Improper lane or location - entrance/exit ramp or way
M47	Improper lane or location - in bicycle lane
M48	Improper lane or location - in occupied lane
M49	Improper lane or location - in HOV or restricted lane
M50	Improper lane or location - limited access highway
M51	Improper lane or location - median
M52	Improper lane or location - not on National Network
M53	Improper lane or location - not on route authorized by permit
M54	Improper lane or location - not on truck route
M55	Improper lane or location - on rail or streetcar tracks
M56	Improper lane or location - on fire hose
M57	Improper lane or location - oncoming traffic lane
M58	Improper lane or location - road shoulder, ditch or sidewalk
M60	Improper lane or location - slower vehicle lane
M61	Improper lane or location - straddling center line(s)
M62	Improper lane or location - traveling in turn (or center) lane
M70	Improper passing
M71	Passing in violation of posted sign or pavement marking
M72	Passing in violation of opposite directions restriction
M73	Passing on wrong side
M74	Passing on hill or curve
M75	Passing school bus displaying warning not to pass
M76	Passing where prohibited
M77	Passing with insufficient distance or visibility
M80	Reckless, careless, or negligent driving
M81	Careless driving
M82	Inattentive driving
M83	Negligent driving
M84	Reckless driving
N01	Failure to yield right of way (FTY ROW)
N02	FTY ROW to animal rider or animal-drawn vehicle
N03	FTY ROW to cyclist
N04	FTY ROW to emergency vehicle (i.e. ambulance, fire equipment, police, etc.)
N05	FTY ROW to funeral procession, procession or parade
N06	FTY ROW to other vehicle
N07	FTY ROW to overtaking vehicle
N08	FTY ROW to pedestrian (includes handicapped or blind)
N09	FTY ROW to school bus

N20	ETV DOW at areasymalls
N21	FTY ROW at crosswalk FTY ROW at rotary
N21 N22	•
	FTY ROW at stop sign
N23	FTY ROW at traffic sign
N24	FTY ROW at traffic signal
N25	FTY ROW at unsigned intersection
N26	FTY ROW at yield sign
N30	FTY ROW when warning displayed on other vehicle
N31	FTY ROW when turning
N40	Failure to use or improper signal
N41	Failure to cancel directional signals
N42	Failure to signal intention to pass
N43	Failure to signal lane change or turn
N44	Giving wrong signal
N50	Improper turn
N51	Improper method of turning
N52	Improper position for turning
N53	Making improper left turn
N54	Making improper right turn
N55	Making improper turn around (not U turn)
N56	Making improper U turn
N60	Driving wrong way
N61	Driving wrong way at rotary intersection
N62	Driving wrong way on divided highway
N63	Driving wrong way on one way street or road
N70	Driving on wrong side
N71	Driving on wrong side of divided highway
N72	Driving on wrong side of undivided street or road
N80	Coasting (operating with gears disengaged)
N81	Clinging to other vehicles
N82	Improper backing
N83	Improper starting
N84	Unsafe operation
S01	01-05 > Speed limit (detail optional)
S06	06-10 > Speed limit (detail optional)
S11	11-15 > Speed limit (detail optional)
S15	Speeding 15 mph or more above speed limit (detail optional)
S16	16-20 > Speed limit (detail optional)
S21	21-25 > Speed limit (detail optional)
S26	26-30 > Speed limit (detail optional)
S31	31-35 > Speed limit (detail optional)
S36	36-40 > Speed limit (detail optional)
S41	41+ > Speed limit (detail optional)
S50	Speeding in a school zone (detail optional)
220	Specuring in a scriour zone (uctair optionar)

S51	01.10 Speed limit (datail entional)
S61	01-10 > Speed limit (detail optional) 11-20 > Speed limit (detail optional)
S71	21-30 > Speed limit (detail optional)
S81	31-40 > Speed limit (detail optional)
S91	
	41+ > Speed limit (detail optional)
S92	Speeding - Speed limit and actual speed (detail required)
S93	Speeding  Direction 1 in the first of the fi
S94	Prima Facie speed violation or driving too fast for conditions
S95	Speed contest (racing) on road open to traffic
S96	Speed less than minimum
S97	Operating at erratic or suddenly changing speeds
S98	Speeding on freeway ("wasting fuel")
S99	Speeding in a school zone
U01	Fleeing or evading police or roadblock
U02	Resisting arrest
U03	Using a motor vehicle in connection with a felony (not traffic offense)
U04	Using a motor vehicle in connection with a misdemeanor (not traffic offense)
U05	Using a motor vehicle to aid and abet a felon
U06	Vehicular assault
U07	Vehicular homicide
U08	Vehicular manslaughter
U20	Damaging or tampering with vehicle
U21	Illegal operation of emergency vehicle
U22	Odometer tampering
U23	Receiving or disposing of stolen vehicle or its parts
U24	Removal, falsification, or unauthorized use of VIN on registration plate
U25	Unauthorized use of a vehicle or taking a vehicle without owner consent
U26	Vehicle theft
U30	Violation resulting in accident
U31	Violation resulting in fatal accident
U32	Violation resulting in personal injury accident
U33	Violation resulting in property damage accident
W01	Accumulation of convictions (including point systems and/or being judged a habitual
	offender or violator)
W10	Withdrawal (reason not specified)
W11	Family report recommended
W12	Immigration law offender
W13	Parental consent withdrawn
W14	Physical or mental disability
	Physicians' or specialists' report recommended
W15	
	Unable to pass DL test(s) or meet qualifications
W20	Unable to pass DL test(s) or meet qualifications Unable to pass re-examination
	Unable to pass DL test(s) or meet qualifications Unable to pass re-examination Under age for license

W24	Under age school dropout
W25	Disobeying terms of probation
W26	Insufficient funds, protested or invalid check
W30	Two serious violations within 3 years
W31	Three serious violations within 3 years
W60	The accumulation of two RRGC violations within 3 years
W61	The accumulation of three or more RRGC violations within 3 years

# Appendix B

**Method of Coding Records Checks** 

#### **Method of Coding Records Checks**

When records are located, investigators describe the content therein. The amount of information available to them varies. For example, dispositions of arrests, to include convictions and terms of sentencing, are not always apparent, and the levels of offenses (e.g., infraction, misdemeanor, felony) are not always noted. Nonetheless, it is clear from their reports when investigators have found some kind of information from an agency for a given subject. Typical examples of ROIs that describe records that are found are as follows<sup>2</sup>:

- 1. A review of the records of the X County Sheriff's Office (LCSO) and the X County Criminal Courts (LCCC), City, State, servicing City and City, State regarding SUBJECT disclosed information pertaining to her Criminal Conduct. CRIMINAL CONDUCT Arrest: LCCC files disclosed that in 19XX, SUBJECT was arrested and charged with dealing in stolen property, a felony offense. This case was filed under LCCC felony division case file # xx-xxx-xx-xx. A review of both LCSO and LCCC files failed to locate any arrest/incident report detailing this arrest. Disposition: On X Sep XX, the LCCC remanded the above felony level case down to a misdemeanor, case file # xx-xxxx-xxx, Attachment 1 pertains. Due to the passage of time, the case file was destroyed in 1993 per LCCC policy. Available record information reflected that on X Sep XX, the case was remanded down to a misdemeanor and on X Oct XX, SUBJECT entered into a pre-trial agreement. On xx Oct XX, the case was dismissed in X County Court, Attachment 2 pertains. (13 Feb 02)
- 2. Records of the Vallejo, CA Police Department disclosed that on XX April XX, SUBJECT was arrested for Driving While Intoxicated (DWI), a misdemeanor and Speeding. (5 Dec 01)
- 3. Records of the Crime Information Center, Georgia Bureau of Investigation, Decatur, GA, servicing all locations in the State of Georgia, revealed SUBJECT was arrested on X Aug XX by the Atlanta Police Department for Affray (fighting). (15 Nov 01)

Figure B-1 Example of Reports of Investigation When Criminal Records Are Found.

\_

<sup>&</sup>lt;sup>2</sup> Information that could reveal or enable determination of personally identifying information has been removed to protect the privacy of the subjects.

In reports of criminal record checks where no records are found, investigators simply list the agency checked or explicitly mention that no records are found. Typical examples of ROIs where information is not found are listed in Figure B-2. <sup>3</sup>

- 1. Records on file with the Yuma County Justice Court First Precinct (YCJCFP), Yuma, AZ, servicing the City of Yuma, AZ and surrounding area, were reviewed and disclosed no information identifiable with Subject. [1817](11 Feb 02)
- 2. Pima County Sheriff's Office, Tucson, AZ. (1 Feb 02)
- 3. Records of the Baltimore City Police Department (BCPD), Baltimore, MD, disclosed no information pertaining to SUBJECT and the listed XX Oct XX charge of Driving While Intoxicated. BCPD files do not contain arrest for Driving While Intoxicated offenses. BCPD files disclosed no additional information. (28 Jan 02)

Figure B-2 Example of Reports of Investigation When Criminal Records Are Not Found.

\_

<sup>&</sup>lt;sup>3</sup> Personally identifying information about subjects has been removed to protect the privacy of the subjects.

## Appendix C

Complete Statistical Match Results and Analysis, Record Level, By State

Table C-1 Complete Statistical Match Results and Analysis, Record Level

					Sampl	e Freque	encies			
A	ny Crime	No	No	No	No	No	No	Yes	Yes	Yes
A	Any Drive	No	No	No	No	No	No	No	No	No
Any Se	elf-Report	No	No	No	Yes	Yes	Yes	No	No	No
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	AK	146	4	150	137	13	150	11	2	13
	AL	147	3	150	144	6	150	101	8	109
	AR	146	4	150	142	8	150	81	29	110
	AZ	146	4	150	133	17	150	103	24	127
	CA	149	1	150	140	10	150	85	5	90
	CO	148	2	150	140	10	150	86	35	121
	CT	145	5	150	143	7	150	124	17	141
	DC	149	1	150	147	2	149	84	6	90
	DE	148	2	150	147	2	149	129	2	131
	FL	144	6	150	144	6	150	112	14	126
	GA	140	10	150	141	9	150	76	12	88
	HI	148	2	150	146	4	150	92	4	96
	IA	140	10	150	139	11	150	51	13	64
	ID	146	4	150	135	15	150	37	8	45
	IL	141	9	150	138	12	150	102	29	131
	IN	141	9	150	141	9	150	105	5	110
	KS	146	3	149	147	3	150	50	8	58
	KY	149	1	150	148	2	150	126	12	138
	LA	148	2	150	144	6	150	106	21	127
	MA	142	7	149	143	7	150	86	24	110
	MD	149	1	150	147	3	150	47	11	58
	ME	147	3	150	140	10	150	83	53	136
	MI	147	3	150	146	4	150	120	14	134
	MN	150	0	150	147	3	150	141	2	143
	MO	149	1	150	141	9	150	101	12	113
	MS	147	2	149	146	4	150	114	13	127

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

					Sample	e Frequ	encies			
An	y Crime	No	No	No	No	No	No	Yes	Yes	Yes
Ai	ny Drive	No	No	No	No	No	No	No	No	No
Any Sel	f-Report	No	No	No	Yes	Yes	Yes	No	No	No
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	MT	149	1	150	145	5	150	25	5	30
	NC	138	11	149	135	15	150	105	19	124
	ND	148	2	150	146	4	150	37	10	47
	NE	148	2	150	149	1	150	44	7	51
	NH	145	5	150	142	7	149	71	31	102
	NJ	146	3	149	143	7	150	125	3	128
	NM	148	2	150	148	2	150	124	9	133
	NV	149	1	150	143	7	150	34	6	40
	NY	145	4	149	143	6	149	109	11	120
	OH	144	6	150	133	17	150	92	23	115
	OK	144	5	149	144	6	150	97	24	121
	OR	135	15	150	122	28	150	42	14	56
	PA	146	3	149	142	8	150	101	20	121
	PR	150	0	150	150	0	150	16	0	16
	RI	143	7	150	141	9	150	42	4	46
	SC	146	4	150	144	6	150	110	18	128
	SD	142	8	150	140	10	150	124	8	132
	TN	143	6	149	139	11	150	40	4	44
	TX	149	1	150	150	0	150	122	1	123
	UT	141	9	150	119	31	150	55	12	67
	VA	141	8	149	138	12	150	116	20	136
	VT	147	3	150	84	2	86	110	10	120
	WA	145	5	150	138	12	150	109	3	112
	WI	143	7	150	114	36	150	67	15	82
	WV	146	4	150	136	14	150	109	31	140
	WY	146	4	150	146	4	150	6	2	8
	Total	7,565	225	7,790	7,280	452	7,732	4,385	693	5,078

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

					Sampl	e Freque	encies			
An	ıy Crime	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$A_I$	ny Drive	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Any Sel	f-Report	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	AK	20	12	32	4	3	7	5	31	36
	AL	71	10	81	37	4	41	63	6	69
	AR	76	15	91	20	20	40	41	18	59
	AZ	78	13	91	14	9	23	20	38	58
	CA	57	3	60	42	18	60	50	40	90
	CO	63	21	84	13	16	29	27	39	66
	CT	93	8	101	7	2	9	29	20	49
	DC	103	5	108	8	2	10	35	7	42
	DE	45	2	47	16	2	18	25	10	35
	FL	90	6	96	19	5	24	23	30	53
	GA	46	17	63	42	20	62	53	34	87
	HI	57	6	63	28	11	39	43	44	87
	IA	61	12	73	68	18	86	35	42	77
	ID	68	23	91	6	6	12	18	39	57
	IL	92	22	114	11	8	19	15	21	36
	IN	80	10	90	26	14	40	34	26	60
	KS	72	9	81	20	16	36	36	32	68
	KY	96	9	105	12	0	12	26	19	45
	LA	100	10	110	9	14	23	30	10	40
	MA	49	18	67	19	21	40	46	37	83
	MD	57	4	61	57	35	92	60	29	89
	ME	43	22	65	4	10	14	24	23	47
	MI	98	9	107	10	6	16	33	10	43
	MN	97	5	102	7	0	7	30	17	47
	MO	66	7	73	26	11	37	47	30	77
	MS	77	4	81	14	9	23	59	10	69

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

					Sampl	e Frequ	encies			
An	y Crime	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	ny Drive	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Any Sel	f-Report	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	MT	86	9	95	4	1	5	16	23	39
	NC	66	22	88	12	14	26	17	45	62
	ND	69	7	76	7	1	8	15	9	24
	NE	44	3	47	75	24	99	47	56	103
	NH	69	20	89	3	6	9	8	26	34
	NJ	78	6	84	8	13	21	20	46	66
	NM	89	2	91	15	2	17	48	11	59
	NV	73	9	82	8	6	14	29	22	51
	NY	91	11	102	26	4	30	38	10	48
	OH	77	20	97	13	22	35	24	28	52
	OK	85	21	106	16	13	29	25	19	44
	OR	52	40	92	8	5	13	21	37	58
	PA	74	16	90	14	15	29	29	31	60
	PR	6	0	6	10	0	10	6	0	6
	RI	55	13	68	15	8	23	28	19	47
	SC	78	25	103	13	9	22	30	17	47
	SD	97	13	110	17	1	18	23	16	39
	TN	54	11	65	88	18	106	53	32	85
	TX	109	1	110	24	3	27	33	7	40
	UT	66	21	87	18	2	20	37	26	63
	VA	83	18	101	9	5	14	24	25	49
	VT	42	7	49	9	10	19	16	14	30
	WA	83	14	97	31	7	38	30	23	53
	WI	100	24	124	0	2	2	3	23	26
	WV	56	18	74	7	3	10	13	22	35
	WY	51	5	56	3	3	6	10	12	22
	Total	3,688	638	4,326	992	477	1,469	1,550	1,261	2,811

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

		Percent Identified by NDR in Sample								
Ar	ıy Crime	No	No	Yes	Yes	Yes	Yes			
A	ny Drive	No	No	No	No	Yes	Yes			
Any Sel	f-Report	No	Yes	No	Yes	No	Yes			
State	AK	2.7	8.7	15.4	37.5	42.9	86.1			
	AL	2.0	4.0	7.3	12.3	9.8	8.7			
	AR	2.7	5.3	26.4	16.5	50.0	30.5			
	AZ	2.7	11.3	18.9	14.3	39.1	65.5			
	CA	0.7	6.7	5.6	5.0	30.0	44.4			
	CO	1.3	6.7	28.9	25.0	55.2	59.1			
	CT	3.3	4.7	12.1	7.9	22.2	40.8			
	DC	0.7	1.3	6.7	4.6	20.0	16.7			
	DE	1.3	1.3	1.5	4.3	11.1	28.6			
	FL	4.0	4.0	11.1	6.3	20.8	56.6			
	GA	6.7	6.0	13.6	27.0	32.3	39.1			
	HI	1.3	2.7	4.2	9.5	28.2	50.6			
	IA	6.7	7.3	20.3	16.4	20.9	54.5			
	ID	2.7	10.0	17.8	25.3	50.0	68.4			
	IL	6.0	8.0	22.1	19.3	42.1	58.3			
	IN	6.0	6.0	4.5	11.1	35.0	43.3			
	KS	2.0	2.0	13.8	11.1	44.4	47.1			
	KY	0.7	1.3	8.7	8.6	0.0	42.2			
	LA	1.3	4.0	16.5	9.1	60.9	25.0			
	MA	4.7	4.7	21.8	26.9	52.5	44.6			
	MD	0.7	2.0	19.0	6.6	38.0	32.6			
	ME	2.0	6.7	39.0	33.8	71.4	48.9			
	MI	2.0	2.7	10.4	8.4	37.5	23.3			
	MN	0.0	2.0	1.4	4.9	0.0	36.2			
	MO	0.7	6.0	10.6	9.6	29.7	39.0			
	MS	1.3	2.7	10.2	4.9	39.1	14.5			

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

		Percent Identified by NDR in Sample							
Any	Crime -	No	No	Yes	Yes	Yes	Yes		
Any	Drive	No	No	No	No	Yes	Yes		
Any Self-	Report	No	Yes	No	Yes	No	Yes		
State	MT	0.7	3.3	16.7	9.5	20.0	59.0		
	NC	7.4	10.0	15.3	25.0	53.8	72.6		
	ND	1.3	2.7	21.3	9.2	12.5	37.5		
	NE	1.3	0.7	13.7	6.4	24.2	54.4		
	NH	3.3	4.7	30.4	22.5	66.7	76.5		
	NJ	2.0	4.7	2.3	7.1	61.9	69.7		
	NM	1.3	1.3	6.8	2.2	11.8	18.6		
	NV	0.7	4.7	15.0	11.0	42.9	43.1		
	NY	2.7	4.0	9.2	10.8	13.3	20.8		
	OH	4.0	11.3	20.0	20.6	62.9	53.8		
	OK	3.4	4.0	19.8	19.8	44.8	43.2		
	OR	10.0	18.7	25.0	43.5	38.5	63.8		
	PA	2.0	5.3	16.5	17.8	51.7	51.7		
	PR	0.0	0.0	0.0	0.0	0.0	0.0		
	RI	4.7	6.0	8.7	19.1	34.8	40.4		
	SC	2.7	4.0	14.1	24.3	40.9	36.2		
	SD	5.3	6.7	6.1	11.8	5.6	41.0		
	TN	4.0	7.3	9.1	16.9	17.0	37.6		
	TX	0.7	0.0	0.8	0.9	11.1	17.5		
	UT	6.0	20.7	17.9	24.1	10.0	41.3		
	VA	5.4	8.0	14.7	17.8	35.7	51.0		
	VT	2.0	2.3	8.3	14.3	52.6	46.7		
	WA	3.3	8.0	2.7	14.4	18.4	43.4		
	WI	4.7	24.0	18.3	19.4	100.0	88.5		
	WV	2.7	9.3	22.1	24.3	30.0	62.9		
	WY	2.7	2.7	25.0	8.9	50.0	54.5		
	Total	2.9	5.8	13.6	14.7	32.5	44.9		

Table C-1 (continued)
Complete Statistical Match Results
and Analysis, Record Level

	Total in	Total in	
	Population	Population	Total in Pop.
	(includes	with	With LAC
	missing	NonMissing	Driving
State	values)	<i>Values</i> <sup>a</sup>	Offense
AK	801	798	43
AL	12,156	12,134	346
AR	3,141	3,137	145
AZ	10,266	10,237	183
CA	21,545	21,467	882
CO	9,582	9,536	271
CT	6,771	6,766	135
DC	9,273	9,242	55
DE	1,339	1,339	53
FL	26,970	26,905	698
GA	19,034	18,989	621
HI	7,850	7,838	135
IA	2,833	2,829	363
ID	1,941	1,934	69
IL	13,251	13,236	150
IN	5,658	5,652	167
KS	5,604	5,591	146
KY	5,745	5,736	201
LA	6,756	6,747	136
MA	9,249	9,238	353
MD	6,854	6,762	789
ME	1,921	1,915	62
MI	6,972	6,947	606
MN	4,713	4,699	127
MO	11,595	11,583	405
MS	4,920	4,916	113

<sup>&</sup>lt;sup>a</sup>Nonmissing values refers to cases not missing values on variables indicating any criminal activity, any driving offense, and any self-report.

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

	Total in	Total in	
	Population	Population	Total in Pop.
	(includes	with	With LAC
	missing	NonMissing	Driving
State	values)	<i>Values</i> <sup>a</sup>	Offense
MT	1,652	1,649	44
NC	17,858	17,746	821
ND	1,511	1,511	32
NE	3,519	3,513	464
NH	2,921	2,918	43
NJ	7,992	7,976	850
NM	3,742	3,733	123
NV	3,078	3,075	65
NY	15,500	15,461	388
OH	10,318	10,302	376
OK	7,683	7,677	252
OR	3,029	3,028	93
PA	12,248	12,223	290
PR	2,622	2,620	16
RI	3,520	3,513	70
SC	10,860	10,847	133
SD	1,254	1,253	57
TN	7,666	7,652	624
TX	10,059	10,028	445
UT	3,673	3,672	127
VA	41,578	41,360	676
VT	869	868	49
WA	11,876	11,859	199
WI	4,319	4,312	59
WV	2,068	2,062	47
WY	1,110	1,108	28
Total	409,265	408,139	13,625
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

<sup>&</sup>lt;sup>a</sup>Nonmissing values refers to cases not missing values on variables indicating any criminal activity, any driving offense, and any self-report.

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

			Total Po	opulation		
Any C	rime No	No	Yes	Yes	Yes	Yes
Any D	Prive No	No	No	No	Yes	Yes
Any Self-Re	port No	Yes	No	Yes	No	Yes
State A	K 50	4 206	13	32	7	36
A	AL 9,38	6 1,832	254	316	92	254
A	AR 2,27	5 421	139	157	47	98
	AZ = 7,62	5 1,982	132	315	24	159
C	CA 15,36	3 4,497	328	397	243	639
	CO 7,12	6 1,608	220	311	57	214
	CT 5,06	7 1,127	174	263	13	122
Γ	OC 7,35	6 1,622	90	119	10	45
Γ	DE 91	3 194	131	48	18	35
F	FL 19,81	5 4,508	908	976	198	500
C	GA 14,08	1 3,587	295	405	166	455
I	HI 6,03	0 1,510	96	67	39	96
I	A 1,80	7 358	129	172	176	187
	D 1,31	0 419	45	91	12	57
I	L 10,29	0 2,247	202	347	29	121
I	N 4,32	2 856	118	189	42	125
k	KS 4,41	0 857	58	120	36	110
K	XY 3,66	7 869	712	287	71	130
L	LA 5,02	8 1,132	174	277	28	108
N	1A 7,32	5 973	357	230	144	209
$\mathbf{N}$	1D 4,38	9 1,053	169	362	263	526
N	<b>IE</b> 1,34	0 299		65	15	47
N	MI 2,86	3 394	2,103	981	209	397
$\mathbf{N}$	IN 3,28	0 643	383	266	24	103
$\mathbf{N}$	1O 8,85	4 1,587	344	393	99	306
N	AS 3,72	1 826	143	113	29	84

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

				Total Popi	ulation		
A	ny Crime	No	No	Yes	Yes	Yes	Yes
A	ny Drive	No	No	No	No	Yes	Yes
Any Se	lf-Report	No	Yes	No	Yes	No	Yes
State	MT	1,251	229	30	95	5	39
	NC	11,844	2,458	1,867	756	344	477
	ND	1,104	252	47	76	8	24
	NE	2,312	518	107	112	237	227
	NH	2,294	390	102	89	9	34
	NJ	4,007	630	2,060	429	562	288
	NM	2,625	595	217	173	22	101
	NV	2,236	652	40	82	14	51
	NY	12,545	1,541	291	696	81	307
	OH	7,971	1,102	345	508	100	276
	OK	5,235	1,368	481	341	87	165
	OR	2,098	662	56	119	13	80
	PA	9,555	1,560	417	401	85	205
	PR	2,361	221	16	6	10	6
	RI	2,829	500	46	68	23	47
	SC	8,518	1,724	202	270	38	95
	SD	778	169	139	110	18	39
	TN	5,445	1,233	161	189	372	252
	TX	6,334	2,007	314	928	73	372
	UT	2,619	685	67	174	20	107
	VA	32,045	6,879	670	1,090	74	602
	VT	564	86	120	49	19	30
	WA	8,989	2,318	121	232	42	157
	WI	3,056	868	82	247	2	57
	WV	1,502	277	162	74	12	35
	WY	831	185	8	56	6	22
	Total	299,095	64,716	16,034	14,669	4,367	9,258

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

	_	Estim	ated Numb	ers Identific	ed by NDR	in the Pop	ulation
An	y Crime	No	No	Yes	Yes	Yes	Yes
Ai	ny Drive	No	No	No	No	Yes	Yes
Any Sel	f-Report	No	Yes	No	Yes	No	Yes
State	AK	13	18	2	12	3	31
	AL	188	73	19	39	9	22
	AR	61	22	37	26	24	30
	AZ	203	225	25	45	9	104
	CA	102	300	18	20	73	284
	CO	95	107	64	78	31	126
	CT	169	53	21	21	3	50
	DC	49	22	6	6	2	8
	DE	12	3	2	2	2	10
	FL	793	180	101	61	41	283
	GA	939	215	40	109	54	178
	HI	80	40	4	6	11	49
	IA	120	26	26	28	37	102
	ID	35	42	8	23	6	39
	IL	617	180	45	67	12	71
	IN	259	51	5	21	15	54
	KS	89	17	8	13	16	52
	KY	24	12	62	25	0	55
	LA	67	45	29	25	17	27
	MA	344	45	78	62	76	93
	MD	29	21	32	24	100	171
	ME	27	20	58	22	11	23
	MI	57	11	220	83	78	92
	MN	0	13	5	13	0	37
	MO	59	95	37	38	29	119
	MS	50	22	15	6	11	12

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

		Estimate	ed Number	s Identifie	d by NDR	in the Po	pulation
An	y Crime	No	No	Yes	Yes	Yes	Yes
Ai	ny Drive	No	No	No	No	Yes	Yes
Any Sel	f-Report	No	Yes	No	Yes	No	Yes
State	MT	8	8	5	9	1	23
	NC	874	246	286	189	185	346
	ND	15	7	10	7	1	9
	NE	31	3	15	7	57	123
	NH	76	18	31	20	6	26
	NJ	81	29	48	31	348	201
	NM	35	8	15	4	3	19
	NV	15	30	6	9	6	22
	NY	337	62	27	75	11	64
	OH	319	125	69	105	63	149
	OK	176	55	95	68	39	71
	OR	210	124	14	52	5	51
	PA	192	83	69	71	44	106
	PR	0	0	0	0	0	0
	RI	132	30	4	13	8	19
	SC	227	69	28	66	16	34
	SD	41	11	8	13	1	16
	TN	219	90	15	32	63	95
	TX	42	0	3	8	8	65
	UT	157	142	12	42	2	44
	VA	1,721	550	99	194	26	307
	VT	11	2	10	7	10	14
	WA	300	185	3	33	8	68
	WI	143	208	15	48	2	50
	WV	40	26	36	18	4	22
	WY	22	5	2	5	3	12
	Total	9,908	3,975	1,890	1,999	1,590	4,079

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

				No. of			
				Additional			
		m . 1	3.7	Offenses	Total no.	D	
		Total no.	No.	Identified	of	Pct. of	D
	T . 1	in Pop.	Identified	by adding	Offenses	Known	Pct. of
	Total no.	With	by Both	NDR	Identified	Driving	Driving
	Identified	LAC	LACs and	Checks to	based on	Offenses	Offenses
C44 -	by NDR in	Driving	NDR in	LAC	LACs and	Identified	Identified by
State	Population	Offense	Population	checks 45	NDR	by LACs	NDR
AK	79 250	43	34		88	48.7	89.8
AL	350	346	31	319	665	52.1	52.6
AR	199	145	53	146	291	49.9	68.5
AZ	611	183	114	498	681	26.9	89.8
CA	797	882	357	440	1,322	66.7	60.3
CO	502	271	158	344	615	44.1	81.6
CT	316	135	53	263	398	33.9	79.3
DC	92	55	10	82	137	40.1	66.9
DE	31	53	12	19	72	73.8	42.9
FL	1,459	698	324	1,135	1,833	38.1	79.6
GA	1,535	621	231	1,303	1,924	32.3	79.8
HI	191	135	60	131	266	50.7	71.6
IA	340	363	139	201	564	64.3	60.3
ID	153	69	45	108	177	39.0	86.4
IL	992	150	83	909	1,059	14.2	93.7
IN	406	167	69	337	504	33.1	80.5
KS	195	146	68	127	273	53.4	71.4
KY	177	201	55	123	324	62.1	54.8
LA	210	136	44	166	302	45.0	69.6
MA	698	353	169	529	882	40.0	79.1
MD	378	789	271	106	895	88.1	42.2
ME	161	62	34	127	189	32.8	85.0
MI	541	606	171	370	976	62.1	55.4
MN	69	127	37	31	158	80.2	43.3
MO	377	405	149	228	633	63.9	59.5
MS	116	113	24	92	205	55.1	56.4

Table C-1 (continued) Complete Statistical Match Results and Analysis, Record Level

				No. of Additional Offenses	Total no.		
		Total no.	No.	Identified	of	Pct. of	
		in Pop.	Identified	by adding	Offenses	Known	Pct. of
	Total no.	With	by Both	NDR	Identified	Driving	Driving
	Identified	LAC	LACs and	Checks to	based on	Offenses	Offenses
State	by NDR in	Driving	NDR in	LAC	LACs and	Identified	Identified
MT	Population 54	Offense 44	Population 24	checks 30	NDR 74	<i>by LACs</i> 59.5	<i>by NDR</i> 73.0
	_		531				
NC	2,127	821		1,595	2,416	34.0	88.0
ND	48	32	10	38	70 520	45.4	68.8
NE	237	464	181	56	520	89.2	45.6
NH	178	43	32	146	189	22.8	94.2
NJ	738	850	549	189	1,039	81.8	71.0
NM	83	123	21	61	184	66.7	44.9
NV	88	65	28	60	125	51.9	70.5
NY	575	388	75	501	889	43.7	64.7
OH	829	376	211	617	993	37.8	83.4
OK	504	252	110	393	645	39.0	78.0
OR	455	93	56	399	492	18.9	92.5
PA	566	290	150	416	706	41.1	80.1
PR	0	16	0	0	16	100.0	0.0
RI	206	70	27	179	249	28.1	82.7
SC	440	133	50	390	523	25.4	84.1
SD	91	57	17	74	131	43.5	69.5
TN	514	624	158	356	980	63.7	52.5
TX	126	445	73	53	498	89.3	25.4
UT	399	127	46	353	480	26.5	83.1
VA	2,897	676	334	2,564	3,240	20.9	89.4
VT	54	49	24	30	79	61.8	68.5
WA	598	199	76	522	721	27.6	82.9
WI	466	59	52	414	473	12.5	98.6
WV	145	47	26	120	167	28.2	87.2
WY	49	28	15	34	62	45.1	79.1
Total	23,441	13,625	5,669	17,772	31,397	43.4	74.7

# Appendix D

**Complete Statistical Match Results** and **Analysis, Subject Level, by State** 

Table D-1 Complete Statistical Match Results and Analysis, Subject Level

	Sample Frequencies									
An	y Crime	No	No	No	No	No	No	Yes	Yes	Yes
An	ıy Drive	No	No	No	No	No	No	No	No	No
Any Self	f-Report	No	No	No	Yes	Yes	Yes	No	No	No
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	AK	146	4	150	137	13	150	11	2	13
	AL	147	3	150	144	6	150	101	8	109
	AR	146	4	150	142	8	150	81	29	110
	AZ	146	4	150	133	17	150	103	24	127
	CA	149	1	150	140	10	150	85	5	90
	CO	148	2	150	140	10	150	86	35	121
	CT	145	5	150	143	7	150	124	17	141
	DC	149	1	150	147	2	149	84	6	90
	DE	148	2	150	147	2	149	129	2	131
	FL	144	6	150	144	6	150	112	14	126
	GA	140	10	150	141	9	150	76	12	88
	HI	148	2	150	146	4	150	92	4	96
	IA	140	10	150	139	11	150	51	13	64
	ID	146	4	150	135	15	150	37	8	45
	IL	141	9	150	138	12	150	102	29	131
	IN	141	9	150	141	9	150	105	5	110
	KS	146	3	149	147	3	150	50	8	58
	KY	149	1	150	148	2	150	126	12	138
	LA	148	2	150	144	6	150	106	21	127
	MA	142	7	149	143	7	150	86	24	110
	MD	149	1	150	147	3	150	47	11	58
	ME	147	3	150	140	10	150	83	53	136
	MI	147	3	150	146	4	150	120	14	134
	MN	150	0	150	147	3	150	141	2	143
	MO	149	1	150	141	9	150	101	12	113
	MS	147	2	149	146	4	150	114	13	127

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

					Sample	e Frequ	encies			
Any	Crime	No	No	No	No	No	No	Yes	Yes	Yes
Any	Drive	No	No	No	No	No	No	No	No	No
Any Self-	Report	No	No	No	Yes	Yes	Yes	No	No	No
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	MT	149	1	150	145	5	150	25	5	30
	NC	138	11	149	135	15	150	105	19	124
	ND	148	2	150	146	4	150	37	10	47
	NE	148	2	150	149	1	150	44	7	51
	NH	145	5	150	142	7	149	71	31	102
	NJ	146	3	149	143	7	150	125	3	128
	NM	148	2	150	148	2	150	124	9	133
	NV	149	1	150	143	7	150	34	6	40
	NY	145	4	149	143	6	149	109	11	120
	OH	144	6	150	133	17	150	92	23	115
	OK	144	5	149	144	6	150	97	24	121
	OR	135	15	150	122	28	150	42	14	56
	PA	146	3	149	142	8	150	101	20	121
	PR	150	0	150	150	0	150	16	0	16
	RI	143	7	150	141	9	150	42	4	46
	SC	146	4	150	144	6	150	110	18	128
	SD	142	8	150	140	10	150	124	8	132
	TN	143	6	149	139	11	150	40	4	44
	TX	149	1	150	150	0	150	122	1	123
	UT	141	9	150	119	31	150	55	12	67
	VA	141	8	149	138	12	150	116	20	136
	VT	147	3	150	84	2	86	110	10	120
	WA	145	5	150	138	12	150	109	3	112
	WI	143	7	150	114	36	150	67	15	82
	WV	146	4	150	136	14	150	109	31	140
	WY	146	4	150	146	4	150	6	2	8
	Total	7565	225	7790	7280	452	7732	4385	693	5078

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

			Sample Frequencies								
Any C	Crime -	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Any	Drive	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	
Any Self-R	eport	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total	
State	AK	20	12	32	4	3	7	5	31	36	
	AL	71	10	81	37	4	41	63	6	69	
	AR	76	15	91	20	20	40	41	18	59	
	AZ	78	13	91	14	9	23	20	38	58	
	CA	57	3	60	42	18	60	50	40	90	
	CO	63	21	84	13	16	29	27	39	66	
	CT	93	8	101	7	2	9	29	20	49	
	DC	103	5	108	8	2	10	35	7	42	
	DE	45	2	47	16	2	18	25	10	35	
	FL	90	6	96	19	5	24	23	30	53	
	GA	46	17	63	42	20	62	53	34	87	
	HI	57	6	63	28	11	39	43	44	87	
	IA	61	12	73	68	18	86	35	42	77	
	ID	68	23	91	6	6	12	18	39	57	
	IL	92	22	114	11	8	19	15	21	36	
	IN	80	10	90	26	14	40	34	26	60	
	KS	72	9	81	20	16	36	36	32	68	
	KY	96	9	105	12	0	12	26	19	45	
	LA	100	10	110	9	14	23	30	10	40	
	MA	49	18	67	19	21	40	46	37	83	
	MD	57	4	61	57	35	92	60	29	89	
	ME	43	22	65	4	10	14	24	23	47	
	MI	98	9	107	10	6	16	33	10	43	
	MN	97	5	102	7	0	7	30	17	47	
	MO	66	7	73	26	11	37	47	30	77	
	MS	77	4	81	14	9	23	59	10	69	

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

					Sampl	e Frequ	encies			
Any	Crime	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Any	Drive	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Any Self-	Report	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
	NDR	No	Yes	Total	No	Yes	Total	No	Yes	Total
State	MT	86	9	95	4	1	5	16	23	39
	NC	66	22	88	12	14	26	17	45	62
	ND	69	7	76	7	1	8	15	9	24
	NE	44	3	47	75	24	99	47	56	103
	NH	69	20	89	3	6	9	8	26	34
	NJ	78	6	84	8	13	21	20	46	66
	NM	89	2	91	15	2	17	48	11	59
	NV	73	9	82	8	6	14	29	22	51
	NY	91	11	102	26	4	30	38	10	48
	OH	77	20	97	13	22	35	24	28	52
	OK	85	21	106	16	13	29	25	19	44
	OR	52	40	92	8	5	13	21	37	58
	PA	74	16	90	14	15	29	29	31	60
	PR	6	0	6	10	0	10	6	0	6
	RI	55	13	68	15	8	23	28	19	47
	SC	78	25	103	13	9	22	30	17	47
	SD	97	13	110	17	1	18	23	16	39
	TN	54	11	65	88	18	106	53	32	85
	TX	109	1	110	24	3	27	33	7	40
	UT	66	21	87	18	2	20	37	26	63
	VA	83	18	101	9	5	14	24	25	49
	VT	42	7	49	9	10	19	16	14	30
	WA	83	14	97	31	7	38	30	23	53
	WI	100	24	124	0	2	2	3	23	26
	WV	56	18	74	7	3	10	13	22	35
	WY	51	5	56	3	3	6	10	12	22
	Total	3688	638	4326	992	477	1469	1550	1261	2811

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

		Percent Identified by NDR in Sample						
Any	Crime -	No	No	Yes	Yes	Yes	Yes	
Any	Any Drive		No	No	No	Yes	Yes	
Any Self-I	Report	No	Yes	No	Yes	No	Yes	
State	AK	2.7	8.7	15.4	37.5	42.9	86.1	
	AL	2.0	4.0	7.3	12.3	9.8	8.7	
	AR	2.7	5.3	26.4	16.5	50.0	30.5	
	AZ	2.7	11.3	18.9	14.3	39.1	65.5	
	CA	0.7	6.7	5.6	5.0	30.0	44.4	
	CO	1.3	6.7	28.9	25.0	55.2	59.1	
	CT	3.3	4.7	12.1	7.9	22.2	40.8	
	DC	0.7	1.3	6.7	4.6	20.0	16.7	
	DE	1.3	1.3	1.5	4.3	11.1	28.6	
	FL	4.0	4.0	11.1	6.3	20.8	56.6	
	GA	6.7	6.0	13.6	27.0	32.3	39.1	
	HI	1.3	2.7	4.2	9.5	28.2	50.6	
	IA	6.7	7.3	20.3	16.4	20.9	54.5	
	ID	2.7	10.0	17.8	25.3	50.0	68.4	
	IL	6.0	8.0	22.1	19.3	42.1	58.3	
	IN	6.0	6.0	4.5	11.1	35.0	43.3	
	KS	2.0	2.0	13.8	11.1	44.4	47.1	
	KY	0.7	1.3	8.7	8.6	0.0	42.2	
	LA	1.3	4.0	16.5	9.1	60.9	25.0	
	MA	4.7	4.7	21.8	26.9	52.5	44.6	
	MD	0.7	2.0	19.0	6.6	38.0	32.6	
	ME	2.0	6.7	39.0	33.8	71.4	48.9	
	MI	2.0	2.7	10.4	8.4	37.5	23.3	
	MN	0.0	2.0	1.4	4.9	0.0	36.2	
	MO	0.7	6.0	10.6	9.6	29.7	39.0	
	MS	1.3	2.7	10.2	4.9	39.1	14.5	

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

		Percent Identified by NDR in Sample						
Any	Crime	No	No	Yes	Yes	Yes	Yes	
An	y Drive	No	No	No	No	Yes	Yes	
Any Self-	-Report	No	Yes	No	Yes	No	Yes	
State	MT	0.7	3.3	16.7	9.5	20.0	59.0	
	NC	7.4	10.0	15.3	25.0	53.8	72.6	
	ND	1.3	2.7	21.3	9.2	12.5	37.5	
	NE	1.3	0.7	13.7	6.4	24.2	54.4	
	NH	3.3	4.7	30.4	22.5	66.7	76.5	
	NJ	2.0	4.7	2.3	7.1	61.9	69.7	
	NM	1.3	1.3	6.8	2.2	11.8	18.6	
	NV	0.7	4.7	15.0	11.0	42.9	43.1	
	NY	2.7	4.0	9.2	10.8	13.3	20.8	
	OH	4.0	11.3	20.0	20.6	62.9	53.8	
	OK	3.4	4.0	19.8	19.8	44.8	43.2	
	OR	10.0	18.7	25.0	43.5	38.5	63.8	
	PA	2.0	5.3	16.5	17.8	51.7	51.7	
	PR	0.0	0.0	0.0	0.0	0.0	0.0	
	RI	4.7	6.0	8.7	19.1	34.8	40.4	
	SC	2.7	4.0	14.1	24.3	40.9	36.2	
	SD	5.3	6.7	6.1	11.8	5.6	41.0	
	TN	4.0	7.3	9.1	16.9	17.0	37.6	
	TX	0.7	0.0	0.8	0.9	11.1	17.5	
	UT	6.0	20.7	17.9	24.1	10.0	41.3	
	VA	5.4	8.0	14.7	17.8	35.7	51.0	
	VT	2.0	2.3	8.3	14.3	52.6	46.7	
	WA	3.3	8.0	2.7	14.4	18.4	43.4	
	WI	4.7	24.0	18.3	19.4	100.0	88.5	
	WV	2.7	9.3	22.1	24.3	30.0	62.9	
	WY	2.7	2.7	25.0	8.9	50.0	54.5	
	Total	2.9	5.8	13.6	14.7	32.5	44.9	

Table D-1 (continued)
Complete Statistical Match Results
and Analysis, Subject Level

	Total in	Total in	
	Population	Population	Total in Pop.
	(includes	with	With LAC
	missing	NonMissing	Driving
State	values)	Values <sup>a</sup>	Offense
AK	800	797	43
AL	12,140	12,118	346
AR	3,138	3,134	145
AZ	10,257	10,228	182
CA	21,541	21,463	882
CO	9,576	9,530	270
CT	6,763	6,758	135
DC	9,269	9,238	55
DE	1,336	1,336	53
FL	26,943	26,879	696
GA	19,021	18,976	620
HI	7,844	7,832	135
IA	2,833	2,829	363
ID	1,939	1,932	68
IL	13,244	13,229	150
IN	5,656	5,650	167
KS	5,601	5,588	144
KY	5,743	5,734	201
LA	6,749	6,740	136
MA	9,238	9,227	353
MD	6,850	6,758	787
ME	1,921	1,915	62
MI	6,969	6,944	606
MN	4,708	4,694	127
MO	11,592	11,580	405
MS	4,910	4,906	112

<sup>&</sup>lt;sup>a</sup>Nonmissing values refers to cases not missing values on variables indicating any criminal activity, any driving offense, and any self-report.

Table D-1 (continued)
Complete Statistical Match Results
and Analysis, Subject Level

	Total in	Total in	
	Population	Population	Total in Pop.
	(includes	with	With LAC
	missing	NonMissing	Driving
State	values)	<i>Values</i> <sup>a</sup>	Offense
MT	1,652	1,649	44
NC	17,842	17,730	819
ND	1,511	1,511	32
NE	3,518	3,512	464
NH	2,918	2,915	43
NJ	7,985	7,969	850
NM	3,738	3,729	123
NV	3,076	3,073	65
NY	15,478	15,439	388
OH	10,305	10,289	376
OK	7,679	7,673	252
OR	3,020	3,019	93
PA	12,236	12,211	289
PR	2,617	2,615	16
RI	3,518	3,511	70
SC	10,852	10,839	133
SD	1,254	1,253	57
TN	7,649	7,635	624
TX	10,054	10,023	443
UT	3,672	3,671	127
VA	41,533	41,315	676
VT	869	868	49
WA	11,868	11,851	197
WI	4,310	4,303	59
WV	2,062	2,056	47
WY	1,110	1,108	28
Total	408,907	407,782	13,607
_	•	•	

<sup>&</sup>lt;sup>a</sup>Nonmissing values refers to cases not missing values on variables indicating any criminal activity, any driving offense, and any self-report.

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

		Total Population						
Any Crime		No	No	Yes	Yes	Yes	Yes	
A	ny Drive	No	No	No	No	Yes	Yes	
Any Se	lf-Report	No	Yes	No	Yes	No	Yes	
State	AK	503	206	13	32	7	36	
	AL	9,372	1,828	254	316	92	254	
	AR	2,272	421	139	157	47	98	
	AZ	7,619	1,978	132	314	24	158	
	CA	15,359	4,497	328	397	243	639	
	CO	7,121	1,607	220	311	57	213	
	CT	5,063	1,123	174	259	13	122	
	DC	7,353	1,621	90	119	10	45	
	DE	912	192	131	46	18	35	
	FL	19,797	4,506	906	966	198	498	
	GA	14,071	3,585	295	402	166	454	
	HI	6,026	1,506	96	67	39	96	
	IA	1,807	358	129	172	176	187	
	ID	1,309	418	45	91	12	56	
	IL	10,285	2,244	202	346	29	121	
	IN	4,320	856	118	189	42	125	
	KS	4,408	857	58	120	36	108	
	KY	3,665	869	712	287	71	130	
	LA	5,022	1,130	174	277	28	108	
	MA	7,315	971	357	230	144	209	
	MD	4,388	1,052	169	360	263	524	
	ME	1,340	299	149	65	15	47	
	MI	2,863	394	2,099	979	209	397	
	MN	3,277	643	381	264	24	103	
	MO	8,853	1,583	344	393	99	306	
	MS	3,713	824	143	112	29	83	

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

				Total Popi	ulation		
	ny Crime	No	No	Yes	Yes	Yes	Yes
A	ny Drive	No	No	No	No	Yes	Yes
Any Sei	lf-Report	No	Yes	No	Yes	No	Yes
State	MT	1,251	229	30	95	5	39
	NC	11,836	2,447	1,865	755	342	477
	ND	1,104	252	47	76	8	24
	NE	2,311	518	107	112	237	227
	NH	2,292	388	102	89	9	34
	NJ	4,003	629	2,058	426	562	288
	NM	2,621	595	217	173	22	101
	NV	2,235	651	40	81	14	51
	NY	12,527	1,534	291	695	81	307
	OH	7,962	1,096	345	506	100	276
	OK	5,231	1,368	481	341	87	165
	OR	2,091	660	56	117	13	80
	PA	9,547	1,558	417	396	85	204
	PR	2,356	221	16	6	10	6
	RI	2,827	500	46	68	23	47
	SC	8,512	1,721	202	269	38	95
	SD	778	169	139	110	18	39
	TN	5,432	1,227	161	187	372	252
	TX	6,332	2,006	314	925	73	370
	UT	2,618	685	67	174	20	107
	VA	32,012	6,862	668	1,085	74	602
	VT	564	86	120	49	19	30
	WA	8,983	2,316	121	232	42	155
	WI	3,048	866	82	247	2	57
	WV	1,496	277	162	74	12	35
	WY	831	185	8	56	6	22
	Total	298,833	64,614	16,020	14,615	4,365	9,242

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

	Estimate	ed Numbe	rs Identifi	ed by NDF	R in the Po	pulation
Any Crime	No	No	Yes	Yes	Yes	Yes
Any Drive	No	No	No	No	Yes	Yes
Any Self-Report	No	Yes	No	Yes	No	Yes
State AK	13	18	2	12	3	31
AL	187	73	19	39	9	22
AR	61	22	37	26	24	30
AZ	203	224	25	45	9	104
CA	102	300	18	20	73	284
CO	95	107	64	78	31	126
CT	169	52	21	21	3	50
DC	49	22	6	6	2	8
DE	12	3	2	2	2	10
FL	792	180	101	60	41	282
GA	938	215	40	108	54	177
HI	80	40	4	6	11	49
IA	120	26	26	28	37	102
ID	35	42	8	23	6	38
IL	617	180	45	67	12	71
IN	259	51	5	21	15	54
KS	89	17	8	13	16	51
KY	24	12	62	25	0	55
LA	67	45	29	25	17	27
MA	344	45	78	62	76	93
MD	29	21	32	24	100	171
ME	27	20	58	22	11	23
MI	57	11	219	82	78	92
MN	0	13	5	13	0	37
MO	59	95	37	38	29	119
MS	50	22	15	6	11	12

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

	Estimated Numbers Identified by NDR in the Population						
Any Crime	No	No	Yes	Yes	Yes	Yes	
Any Drive	No	No	No	No	Yes	Yes	
Any Self-Report	No	Yes	No	Yes	No	Yes	
State MT	8	8	5	9	1	23	
NC	874	245	286	189	184	346	
ND	15	7	10	7	1	9	
NE	31	3	15	7	57	123	
NH	76	18	31	20	6	26	
NJ	81	29	48	30	348	201	
NM	35	8	15	4	3	19	
NV	15	30	6	9	6	22	
NY	336	62	27	75	11	64	
OH	318	124	69	104	63	149	
OK	176	55	95	68	39	71	
OR	209	123	14	51	5	51	
PA	192	83	69	70	44	105	
PR	0	0	0	0	0	0	
RI	132	30	4	13	8	19	
SC	227	69	28	65	16	34	
SD	41	11	8	13	1	16	
TN	219	90	15	32	63	95	
TX	42	0	3	8	8	65	
UT	157	142	12	42	2	44	
VA	1,719	549	98	193	26	307	
VT	11	2	10	7	10	14	
WA	299	185	3	33	8	67	
WI	142	208	15	48	2	50	
WV	40	26	36	18	4	22	
WY	22	5	2	5	3	12	
Total	9,898	3,968	1,888	1,992	1,589	4,072	

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

State	Total no. Identified by NDR in Population	Total no. in Pop. With LAC Driving Offense	No. Identified by Both LACs and NDR in Population	No. of Additional Offenses Identified by adding NDR Checks to LAC checks	Total no. of Offenses Identified based on LACs and NDR	Pct. of Known Driving Offenses Identified by LACs	Pct. of Driving Offenses Identified by NDR
AK	79	43	34	45	88	48.7	89.8
AL	349	346	31	318	664	52.1	52.6
AR	199	145	53	146	291	49.9	68.5
AZ	610	183	113	497	680	26.9	89.7
CA	797	882	357	440	1,322	66.7	60.3
CO	501	271	157	343	614	44.1	81.5
CT	315	135	53	263	398	33.9	79.3
DC	92	55	10	82	137	40.1	66.9
DE	31	53	12	19	72	73.9	42.8
FL	1,456	698	323	1,133	1,831	38.1	79.5
GA	1,533	621	231	1,302	1,923	32.3	79.7
HI	190	135	60	131	266	50.8	71.6
IA	340	363	139	201	564	64.3	60.3
ID	152	69	44	108	177	39.0	86.0
IL	991	150	83	908	1,058	14.2	93.6
IN	406	167	69	337	504	33.1	80.5
KS	194	146	67	127	273	53.4	71.0
KY	177	201	55	123	324	62.1	54.8
LA	210	136	44	166	302	45.0	69.6
MA	697	353	169	529	882	40.0	79.1
MD	377	789	271	106	895	88.2	42.1
ME	161	62	34	127	189	32.8	85.0
MI	540	606	171	369	975	62.1	55.4
MN	68	127	37	31	158	80.3	43.2
MO	377	405	149	228	633	64.0	59.5
MS	115	113	23	92	205	55.1	56.3

Table D-1 (continued) Complete Statistical Match Results and Analysis, Subject Level

				No. of Additional Offenses	Total no.		
		Total no.	No.	Identified	of	Pct. of	
		$in\ Pop.$	Identified	by adding	Offenses	Known	Pct. of
	Total no.	With	by Both	NDR	Identified	Driving	Driving
	Identified	LAC	LACs and	Checks to	based on	Offenses	Offenses
G, ,	by NDR in	Driving	NDR in	LAC	LACs and	Identified	Identified
State	Population	Offense	Population	checks	NDR	by LACs	by NDR
MT	54	44	24	30	74	59.5	73.0
NC	2,123	821	530	1593	2,414	34.0	88.0
ND	48	32	10	38	70	45.4	68.8
NE	237	464	181	56	520	89.2	45.6
NH	178	43	32	146	189	22.8	94.2
NJ	737	850	549	189	1,039	81.8	71.0
NM	83	123	21	61	184	66.7	44.9
NV	88	65	28	60	125	51.9	70.4
NY	574	388	75	500	888	43.7	64.7
OH	827	376	211	616	992	37.9	83.4
OK	503	252	110	393	645	39.1	78.0
OR	453	93	56	397	490	19.0	92.5
PA	564	290	149	415	705	41.2	80.0
PR	0	16	0	0	16	100.0	0.0
RI	206	70	27	179	249	28.1	82.7
SC	439	133	50	390	523	25.5	84.1
SD	91	57	17	74	131	43.5	69.5
TN	513	624	158	355	979	63.7	52.4
TX	126	445	73	53	498	89.3	25.3
UT	399	127	46	353	480	26.5	83.1
VA	2,893	676	334	2,559	3,235	20.9	89.4
VT	54	49	24	30	79	61.8	68.5
WA	596	199	75	521	720	27.6	82.8
WI	465	59	52	413	472	12.5	98.6
WV	145	47	26	120	167	28.2	87.2
WY	49	28	15	34	62	45.1	79.1
Total	2,3408	13,625	5,661	17,747	31,372	43.4	74.6

### **Appendix E**

Complete Statistical Match Results and Analysis, Aggregated by Subject, Across All States

Table E-1 Sample Totals, Aggregated by Subject

Any Criminal	Any Driving	Any Self-	NDR .	Match		Match		
Offense	Offense	Report	No	Yes	Total	Pct.		
No	No	No	5,374	548	5,922	9.2		
No	No	Yes	4,037	891	4,928	18.1		
Yes	No	No	3,823	1,052	4,875	21.6		
Yes	No	Yes	2,979	991	3,970	25.0		
Yes	Yes	No	847	597	1,444	41.3		
Yes	Yes	Yes	1,256	1,459	2,715	53.7		
	Sum (All NDR Match = Yes) $5538$							
	Sum (Any Driving Offense = Yes) 4159							
Sum (All	Sum (All NDR Match = Yes OR Any Driving Offense = Yes) 7641							
Sum (N	NDR Match	= Yes AND	Any Driv	ing Offen	se = Yes)	2056		

Table E-2 Population Totals, Aggregated by Subject

Any Criminal	Any Driving	An			
Offense	Offense	No	Yes	Missing	Total
No	No	184,926	30,674	640	216,240
Yes	No	14,949	12,498	113	27,560
Yes	Yes	4,262	8,695	92	13,049
				Total	256,849
			Total,	nonmissing	256,004

Table E-3
Population Estimates

Any	Any		Est. No.
Criminal	Driving	Any Self-	of NDR
Offense	Offense	Report	Matches
No	No	No	17,112.4
No	No	Yes	5,546.0
Yes	No	No	3,225.9
Yes	No	Yes	3,119.8
Yes	Yes	No	1,762.1
Yes	Yes	Yes	4,672.6
	Sum(All N	IDR Match)	35,438.6
Sum(Any Driving Offense = Yes)			6,434.6
Sum(Any Driving Offense = No)			29,004.0
Sum(All NDR or LAC)			42,053.0
Pct. of Known Subjects with Driving Offenses:			
Identified by LACs:			31.0%
Identified by NDR:			84.3%